

Title (en)
Air conditioner with service valve assembly

Title (de)
Klimaanlage mit Versorgungsventilanordnung

Title (fr)
Climatiseur avec ensemble de robinet de service

Publication
EP 2031314 A2 20090304 (EN)

Application
EP 08014775 A 20080820

Priority
KR 20070087199 A 20070829

Abstract (en)
An air conditioner with a service valve assembly (700, 800) is disclosed wherein service valves are used for easy infusion and collection of refrigerant at the time of installation or detachment of separation-type multi-air conditioner mounted with a plurality of indoor units (200) reducing the manufacturing costs and unit size. The air conditioner comprises: an outdoor unit (100) including a compressor (130) and heat exchanger (160); a plurality of indoor units (200) including an expander and an indoor heat exchanger; a plurality of refrigerant input pipes; a first convergence piping for converging the refrigerant flowing in the plurality of refrigerant input pipes into the compressor; a second convergence piping for converging and introducing the refrigerant having passed the outdoor heat exchanger via the compressor into the plurality of indoor units; a plurality of refrigerant supply pipes; and first and second service valves for controlling fluid flow.

IPC 8 full level
F24F 1/00 (2011.01); **F25B 45/00** (2006.01)

CPC (source: EP KR US)
F24F 1/00 (2013.01 - KR); **F24F 1/32** (2013.01 - EP US); **F24F 1/56** (2013.01 - EP US); **F24F 3/00** (2013.01 - KR); **F25B 45/00** (2013.01 - EP US); **F25B 2345/006** (2013.01 - EP US)

Cited by
EP2594869A1; EP3564594A4; US11971202B2; EP2402671A4; EP3978822A4; US9459025B2

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)
AL BA MK RS

DOCDB simple family (publication)
EP 2031314 A2 20090304; CN 101377331 A 20090304; CN 101377331 B 20101215; KR 20090022119 A 20090304; US 2009056357 A1 20090305

DOCDB simple family (application)
EP 08014775 A 20080820; CN 200810130907 A 20080829; KR 20070087199 A 20070829; US 23025108 A 20080826